REMARKS

I. General

Claims 1, 3-11, and 13-29 were pending in the present application. Applicant notes with appreciation the indication in the Final Office Action (mailed July 14, 2004) of allowance of claims 5, 9, 28, and 29. Applicant further notes with appreciation the indication in the Final Office Action of claims 23 and 25 as being allowable if rewritten in independent form. The Final Office Action rejects claims 1, 3, 4, 6, 7, 8, 10, 11, 13-22, 24, 26, and 27. The issues raised in the Office Action are:

- Claims 1, 3, 4, 6, 7, 8, 10, 11, 13-22, 24, 26, and 27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,760,925 to Saund et al. (hereinafter "*Saund*") in view of U.S. Patent No. 4,513,319 to Breimer (hereinafter "*Breimer*"); and

- Claims 6 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Saund* in view of *Breimer* and in further view of the present application specification on page 3, lines 8-21.

Applicant traverses the outstanding issues and requests, in view of the remarks set forth below, that the Examiner withdraw the rejections and pass the application to allowance.

II. Amendment to Claim 15

Claim 15 is amended herein to recite that the calibration path is "an internal calibration path". Entry of this amendment is respectfully requested as it places the application in condition for allowance, or at least in better form for appeal as it makes the claim language consistent with the arguments previously presented by Applicant regarding the internal calibration path of *Breimer* (*see* page 10 of Applicant's Amendment mailed April 14, 2004). No new matter is added by this amendment.

III. Rejections under 35 U.S.C. § 103(a)—Combination of *Saund* and *Breimer*

Claims 1, 3, 4, 6, 7, 8, 10, 11, 13-22, 24, 26, and 27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Saund* in view of *Breimer*. Applicant respectfully traverses this rejection as discussed further below.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art cited must teach or suggest all the claim limitations. *See* M.P.E.P. §2143. Without conceding any other criteria, Applicant respectfully asserts that the rejection does not satisfy the first or third criteria for establishing a prima facie case of obviousness.

A. Applied Combination Fails to Teach All Claim Elements

Independent Claims 1 and 7

Independent claim 1 recites in part "focusing on a calibration area within said look-down digital imaging device".

Independent claim 7 recites in part "calibration area arranged within said look-down digital imaging device ... wherein said look-down digital imaging device is operable to achieve an in-focus scan of said calibration area for calibration of said look-down digital imaging device" (emphasis added).

To make a proper 35 U.S.C. § 103(a) rejection, the applied art must teach or suggest all the claim limitations. *See* M.P.E.P. §2143. The combination of *Saund* and *Breimer* does not teach or suggest the limitations recited above for independent claims 1 and 7. As the Final Office Action admits (on page 3 thereof), *Saund* fails to disclose a calibration area within its look-down imaging system. Instead, *Saund* teaches an external calibration system 14 on the surface of the platform 8. However, the Final Office Action relies on *Breimer's* teaching of a device that has an internal calibration area in asserting that it would have been obvious to combine such a device into *Saund's* system.

Breimer teaches a method for automatically setting up a television camera in which an external test pattern is present on a test chart in front of the camera and an internal test pattern is present in the camera in the optical path between a camera lens system and a camera pickup arrangement. *See* Abstract of *Breimer*. More specifically, *Breimer* provides at column 1, line 52 – column 2, line 6:

> According to the invention, a setup method which precedes the normal preparations for scene recording includes two separate steps in which an external and an internal test pattern are used separately. During the setup with the external test pattern, the external test pattern is present on a test chart in front of the camera. During the setup with the internal test pattern, the internal test pattern is present in the camera in the optical path between a lens system of the camera and the pickup arrangement. The separate setups with the external and internal test patterns are effected with a non-blocked optical path and a blocked optical path, respectively in which the lens system is incorporated.
>
> ... The correction information associated with the internal test pattern is subtracted from the correction information associated with the external test pattern, and the resulting correction difference information (which relates to at least the lens system) is stored in a lens memory. The camera memory and lens memory together produce the correction information for correction with minimal error.

Breimer fails to teach or suggest at least the above-identified elements of independent claims 1 and 7. For instance, *Breimer* fails to teach or suggest using "an in-focus scan of said calibration area for calibration", as recited by independent claims 1 and 7. Rather, *Breimer* specifically teaches that the optical path between the lens system and the camera pickup arrangement is blocked when scanning its internal test pattern. Thus, *Breimer* does not teach an in-focus scan of such internal test pattern.

In response to the above arguments (which were presented by Applicant in the Amendment mailed April 14, 2004), the Final Office Action asserts that "even though in Breimer's device the optical path between the lens system and the camera pickup arrangement is blocked during scanning of the internal test pattern, such scanning is in-focus due to the close proximity of the test pattern and the camera pick up arrangement." Page 2 of Final Office Action. Applicant fails to understand this statement by the Examiner. First, *Breimer* provides no teaching or suggestion that the close proximity between the test pattern and the camera pick up arrangement results in the test pattern being scanned in focus. Further, the mere fact that the test pattern may be arranged in close proximity to the pick up arrangement in *Breimer* does not necessarily mean that the test pattern is in focus. For instance, the pick up arrangement may have a focal point at a distance much greater than the proximity of the test pattern, such as at the position of lens system 4 in order to be focused on the images being received from such lens system 4 during normal operation of the camera 2. Additionally, *Breimer* does not teach or suggest that the internal test pattern is to be in focus in order to perform its calibration. Certain calibrations can be performed without requiring

that the test pattern be in focus. As an example, the test pattern 18 could consist of a purely white pattern and the pickup arrangement 5 can scan such white pattern without focusing on it and still detect whether the pickup arrangement recognizes the pattern as white. Accordingly, *Breimer* fails to provide any teaching or suggestion that its scan of the internal test pattern 18 is in focus.

In view of the above, neither *Saund* nor *Breimer* teach or suggest the above-identified elements of independent claims 1 and 7. As such, the applied combination of *Saund* and *Breimer* fails to teach or suggest at least the above-identified elements of independent claims 1 and 7. Therefore, Applicant respectfully asserts that independent claims 1 and 7 are patentable over the applied combination.

Dependent Claims 3, 4, 6, 8, 10, 11, 13-14, 21-22, and 24

Further, dependent claims 3, 4, 6, 8, 10, 11, 13-14, 21-22, and 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Saund* in view of *Breimer*. Each of these dependent claims depend either directly or indirectly from one of independent claims 1 and 7 and thereby inherit all of the limitations of their respective independent claims. Accordingly, without conceding that the Examiner's assertions are valid with respect to the limitations of the rejected dependent claims, it is respectfully submitted that these dependent claims are allowable based on their dependency from their respective independent claims 1 and 7 for the reasons discussed above.

Independent Claim 15

Independent claim 15, as amended herein, recites "a look-down digital imaging device that includes means for imaging a target scan area and means for calibrating said look-down digital imaging device, wherein the calibrating means uses an internal calibration path that mimics an imaging path to be used by said look-down digital imaging device for imaging said target scan area" (emphasis added).

As mentioned above, *Saund* fails to teach or suggest an internal calibration path. Thus, *Breimer* is relied upon by the Final Office Action as teaching an internal calibration path. However, *Breimer* fails to teach or suggest an internal calibration path "that mimics an imaging path to be used" by its camera 2 for imaging a target scan area. That is, the optical path used for scanning the internal test pattern in *Breimer* does not mimic an imaging path to

be used for imaging a target scan area. Indeed, the Examiner expressly agrees that *Breimer* fails to teach this element on page 2 of the Final Office Action.

However, the Examiner asserts in the Final Office Action that *Saund* discloses this element (*see* page 2 of the Final Office Action). Applicant has recognized that although Applicant previously argued that the calibration path was not taught by the internal path of *Breimer*, the language of claim 15 did not limit the calibration path to an internal path. Thus, Applicant respectfully requests entry of the amendment to claim 15 presented herein, which specifies that the calibration path is "an internal calibration path". *Saund* does not teach or suggest an internal calibration path, but instead uses an external calibration path. Entry of this amendment to claim 15 is respectfully requested as it places the application in condition for allowance given that it clearly distinguishes from the external calibration path of *Saund* and given that the Examiner concedes that *Breimer's* internal calibration path fails to satisfy this element. At the very least, this amendment places the application in better form for appeal as it makes the claim language consistent with the arguments previously presented by Applicant regarding the internal calibration path of *Breimer*.

In view of the above, Applicant respectfully submits that claim 15 is not obvious under 35 U.S.C. § 103(a) over the applied combination of *Saund* and *Breimer* because the applied combination fails to teach or suggest all elements of claim 15.

Dependent Claims 16-20

Further, dependent claims 16-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Saund* in view of *Breimer*. Each of these dependent claims depend either directly or indirectly from independent claim 15 and thereby inherit all of the limitations of independent claim 15. Accordingly, without conceding that the Examiner's assertions are valid with respect to the limitations of the rejected dependent claims, it is respectfully submitted that these dependent claims are allowable based on their dependency from independent claim 15 for the reasons discussed above.

Independent Claim 26

Independent claim 26 recites in part "a method of calibrating a look-down digital imaging device, wherein said calibrating method does not require ever scanning a calibration area that is external to said look-down digital imaging device". The Final Office Action

asserts at page 5 that "Regarding claims 26 and 27 the arguments analogous to those presented for claim 1 are applicable to claims 26 and 27." Applicant notes, however, that the above-recited limitation is present in claim 26, which is not present and claim 1. Accordingly, the rejection of claim 1 fails to address this limitation of claim 26.

Additionally, the applied combination of *Saund* and *Breimer* fails to teach or suggest at least this limitation of claim 26. That is, *Saund* teaches a calibration technique that scans a calibration area that is external to its look-down digital imaging device. Further, *Breimer* teaches a calibration technique that requires scanning a calibration area that is external to its camera 2 (i.e., external test pattern 1). *Breimer* does not teach or suggest that the scanning of the external calibration area can be eliminated. *Breimer* teaches at col. 2, lines 38-43:

> For each lens system, a setup with the external and internal test patterns needs to be performed only once, and the associated lens memory is loaded with the correction difference information. Thereafter during use of the camera only the internal test pattern in the camera is required for setup.

Thus, *Breimer* teaching a calibration technique in which scanning an external calibration area may only be required to be performed once for each lens system, However, it fails to teach or suggest a calibration method that "does not require ever scanning a calibration area that is external to said look-down digital imaging device" (emphasis added), as recited by claim 26.

In view of the above, neither *Saund* nor *Breimer* teach or suggest the above-identified element of independent claim 26. As such, the applied combination of *Saund* and *Breimer* fails to teach or suggest at least the above-identified element of independent claim 26. Therefore, Applicant respectfully asserts that independent claim 26 is patentable over the applied combination.

Dependent Claim 27

Further, dependent claim 27 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Saund* in view of *Breimer*. Claim 27 depends from independent claim 26 and thereby inherits all of the limitations of claim 26. Accordingly, without conceding that the Examiner's assertions are valid with respect to the limitations of claim 27, it is respectfully submitted that this dependent claim is allowable based on its dependency from independent claim 26 for the reasons discussed above.

B. Lack of Motivation to Combine References

To make a proper 35 U.S.C. § 103(a) rejection there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify a reference or to combine reference teachings, and it is the Examiner's initial burden to provide some suggestion or motivation. *See* M.P.E.P § 2142. The Final Office Action fails to identify proper suggestion or motivation to combine *Saund* and *Breimer*. The Final Office Action asserts on page 3:

> Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to combine Breimer's device with that of Saund et al., because, the combination would form a look down imaging apparatus with calibration area within the device in the proper position.

This line of logic does not identify proper motivation for combining *Saund* and *Breimer*. Rather, this is simply a statement that it would be obvious to combine the references because such a combination can be made. It is well settled that the fact that references can be combined is not sufficient to establish a prima facie case of obviousness, M.P.E.P. § 2143.01. Further, the language of the recited motivation is circular in nature, stating that it is obvious to make the combination because it is obvious to achieve the result. In other words, the recited motivation states that it is obvious to combine the internal calibration area of *Breimer* with the look down imaging apparatus of *Saund* because such a combination would result in a look down imaging apparatus with the internal calibration area. Such a statement can always be made for any combination (i.e., it is obvious to combine the references because it would result in the combination). However, this fails to identify any motivation (or desire) that would lead one of ordinary skill in the art to make such a combination.

In response to Applicant's previous arguments regarding lack of motivation to combine *Saund* and *Breimer* in the manner suggested by the Examiner, the Final Office Action further asserts on page 2 thereof that the "examiner disagrees with the applicant, because, both references address calibration procedure, one with external test pattern and the other with both internal and external test pattern." Again, this is not a statement of motivation, but is merely a statement that both references address calibration. Merely because the references are both directed to calibration procedures does not provide any

motivation for combining their respective teachings in the manner suggested by the Examiner. Indeed, given that *Saund* provides a calibration technique for a look-down digital imaging device, what would motivate one of skill in the art to look to the calibration technique of *Breimer* for calibrating the device of *Saund*?

The mere fact that references can be combined does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination, M.P.E.P. § 2143.01. Thus, the current Office Action fails to identify proper motivation for making the applied combination, as the motivation must establish the desirability for making the combination. Rather, it appears that the motivation is provided by the disclosure of the present application. The motivation must be provided by the prior art, not by Applicant's disclosure. Relying on Applicant's disclosure for piecing together the combination is impermissible hindsight. M.P.E.P. § 2143.01.

IV. Rejections under 35 U.S.C. § 103(a)—Combination of *Saund*, *Breimer*, and the present application's specification

Claims 6 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable *Saund* in view of *Breimer* and in further view of the present application's specification at page 3, lines 8-21. Claims 6 and 20 depend directly or indirectly from their respective independent claims 1 and 15 and thereby inherit all of the limitations of their respective base claims. Accordingly, without conceding that the current Office Action's assertions are valid with respect to the limitations of the rejected dependent claims, it is respectfully submitted that the dependent claims are allowable based on their dependency from independent claims 1 and 15 for the reasons discussed above. Thus, Applicant respectfully submits that based on at least the arguments above, claims 6 and 20 are patentable under 35 U.S.C. §103(a).

V. Conclusion

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Applicant believes no fee is due with this response. However, if a fee is due, please charge Deposit Account No. 08-2025, under Order No. 10001227-1 from which the undersigned is authorized to draw.

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Label No. EV 482734956US in an envelope addressed to: M/S AF, Commissioner for Patents, Alexandria, VA 22313.

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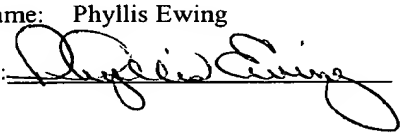
Signature: 

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